UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,423	03/21/2001	Masayuki Yamamoto	36992.00066	4089

30256	7590	11/18/2004

SQUIRE, SANDERS & DEMPSEY L.L.P
600 HANSEN WAY
PALO ALTO, CA 94304-1043

EXAMINER
VIG, NARESH

ART UNIT	PAPER NUMBER
3629	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/814,423	YAMAMOTO ET AL.
	Examiner	Art Unit
	Naresh Vig	3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

This is in reference to response received on August 23, 2004 to the office action mailed on 4/21/2004. There are 19 claims, claims 1 – 19 pending for examination.

Response to Arguments

Applicant's arguments with respect to claims 1 - 19 have been considered but are moot in view of the new ground(s) of rejection because applicants arguments are for the amended claims presented to the office on August 23, 2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically teachd or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lumelsky et al. US Patent 6,516,350 in view of an article Two Thumbs Up hereinafter

known as Coyote and Stumm US Patent 5,768,528 and further in view of Stumm US

Patent 5,768,528.

Regarding claim 1, Lumelsky teaches managing storage access (distributed

system for the management of distributed resources interconnected by a computer

network and comprised of a plurality of limited supply resources (such as those

associated with multimedia content servers, e.g., bandwidth, CPU, storage, etc.,))

[abstract]. Lumelsky teaches:

a disk system;

a disk system manager, operative to manage information storage to and retrieval

from said disk system [Fig. 6] and

a storage access service system operative to grant authorization to access said

disk system [Fig. 6].

Lumelsky does not teach time based component (for billing purpose). However,

Lumelsky teaches to have per-flow policies such as policy for service delivery, including

availability, quality, interactivity level, etc. [col. 9, lines 61 – 63]. Official notice it taken

time base component have been used to generate billing. For example, telephone calls

(services used by the user for accessing telephone carrier's services) vary in prices

based upon the time they place the call. Coyote teaches that SprintPCS offer calling

plans based upon time of user. Therefore, it would have been obvious to one of ordinary

skill in the art at the time the invention was made that one of ordinary skill in the art to modify Lumelsky as taught by Coyote [page 1] and implement billing and pricing based upon time to control the peak demand during the normal business hours.

Lumelsky in view of Coyote does not teach time component (for scheduled access). However, Stumm teaches system and method for operating a server system adapted to provide information files to a plurality of subscribers over communications network. Stumm teaches that each publisher is allowed to control the times which a subscriber is scheduled to access server system 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lumelsky in view of Coyote as taught by Stumm to secure the system resources.

Regarding claim 2, Lumelsky in view of Coyote and Stumm teaches time component further comprises time zone information, and wherein said storage access service system determines charges for user access service based upon said time component and access time.

Regarding claim 3, Lumelsky in view of Coyote and Stumm teaches said storage access service system determines charges for user access based upon a history of accesses (Lumelsky teaches to have billing capability).

Regarding claim 4, Lumelsky in view of Coyote and Stumm teaches storage access service system determines charges by comparing said history of accesses to a billing rate schedule and thereupon computing a cost of access by summing a cost for each access according to said billing rate schedule (Lumelsky teaches to have policies and billing capability).

Regarding claim 5, Lumelsky in view of Coyote and Stumm teaches billing rate schedule is determined from a service level agreement (SLA) (Coyote teaches billing rates determined from SLA, e.g. terms and conditions of the contract).

Regarding claim 6, Lumelsky in view of Coyote and Stumm teaches users agree to access said at least one storage unit during a preset schedule (terms and condition of contract for using product or service), and wherein said storage access service system determines charges for user access service based upon preset schedule (Lumelsky teaches to have policies and billing capabilities, Coyote teaches plurality of plans for access to cellular phone (product) services).

Regarding claims 7, Lumelsky in view of Coyote and Stumm teaches storage access service system determines charges for user access said preset schedule to a billing rate schedule and thereupon computing a cost of said preset schedule (Lumelsky teaches to have policies and billing capabilities [col. 9, lines 61 – 63]).

Regarding claim 8, Lumelsky in view of Coyote and Stumm teaches billing rate

schedule is determined from a service level agreement (SLA). (Lumelsky teaches to

have policies and billing capabilities [col. 9, lines 61 – 63], Coyote teaches SLA).

Regarding claim 9, Lumelsky in view of Coyote and Stumm teaches storage

access service system determines charges by comparing said preset schedule to a

billing rate schedule to determine an applicable billing rate and thereupon computing a

cost of said preset schedule in a billing cycle (Lumelsky teaches to have policies and

billing capabilities [col. 9, lines 61 – 63], Coyote teaches SLA).

Regarding claim 10, Lumelsky in view of Coyote and Stumm teaches plurality of

billing rate schedule is determined from a service level agreement (SLA). (Lumelsky

teaches to have policies and billing capabilities [col. 9, lines 61 – 63], Coyote teaches

SLA).

Regarding claim 11, Lumelsky teaches system and method for managing access

to storage resources, comprising:

Lumelsky does not teach system having plurality of tables. However, Coyote

teaches service provider having plurality of rate plans (plurality of tables).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Lumelsky as taught by Coyote to cater to the

needs of clients.

Lumelsky in view of Coyote teaches:

storing user information including an identity of a user; an identity of a resource,

a time zone, and at least one of billing rate for accessing said resource in a first table of

the plurality of tables;

receiving a computer-based request to access said resource from a user;

granting access to said resource based upon said identity of said user, said

identity of said resource, and said time zone using the first table (security) [Lumelsky

Fig. 6];

storing access information including said identity of said user, said identity of said

resources, and said time zone in a second table of said plurality of tables (Lumelsky

teaches billing capability); and

determining charges for accessing said resource based upon said identity of said

user, said identity of said resource, and said at least one billing rate using the first table

and the second table (Lumelsky teaches billing capability, Coyote teaches SLA).

Lumelsky in view of Coyote does not teach zone (for scheduled access).

However, Stumm teaches system and method for operating a server system adapted to

provide information files to a plurality of subscribers over communications network.

Stumm teaches that each publisher is allowed to control the times which a subscriber is

scheduled to access server system 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Lumelsky in view of Coyote as taught by Stumm

to secure the system resources.

Regarding claim 12, Lumelsky in view of Coyote and Stumm teaches logging individual instances of access to said resource into a history of accesses in said second table (logging individual instances of access to said resource into a history of accesses) [Lumelsky, col. 4, line 67].

Regarding claims 13 – 14, Lumelsky in view of Coyote and Stumm teaches policies and billing capabilities. Lumelsky does not teaches how the bill is generated. However, Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that bills for usage is generated by

determining time of usage (usage time for each individual instance of access selected from said history of accesses;

unit rate to be charged to use the system at that time (billing rate corresponding to said usage time from among said at least one of a plurality of billing rates; and

calculating the amount to be charged to the user (computing a cost by summing a cost for each individual instance of access selected from said history of accesses, said cost computed by multiplying said usage time by said billing rate corresponding to said usage time).

For example, monthly usage bill from the telephone service provider. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to Lumelsky billing has necessary steps to generate the bill for customers for invoice them for the money they owe the service provider.

Lumelsky does not teach time zone. However, Coyote teaches that Sprint gives

roaming capability to their users (users in different time zones). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

modify Lumelsky as taught by Coyote to allow the customers to access system form

plurality locations and pay according to the agreement.

Regarding claim 15, Lumelsky in view of Coyote and Stumm teaches user

agrees to access said resource at a time period in accordance with a preset schedule;

and wherein said granting access to said resource based upon said identity of said

user, said identity of said resource, and said time zone comprises:

granting said user access to said resource within said time period in accordance

with said preset schedule (Coyote teaches SLA, Stumm teaches scheduled access)

Regarding claims 16 – 17, Lumelsky in view of Coyote and Stumm does not

teaches how the bill is generated. However, Official notice it taken that it would have

been obvious to one of ordinary skill in the art at the time the invention was made that

bills for usage is generated by

determining time of usage (usage time for each individual instance of access

selected from said history of accesses;

unit rate to be charged to use the system at that time (billing rate corresponding

to said usage time from among said at least one of a plurality of billing rates; and

calculating the amount to be charged to the user (computing a cost by summing

a cost for each individual instance of access selected from said history of accesses,

said cost computed by multiplying said usage time by said billing rate corresponding to

said usage time).

For example, monthly usage bill from the telephone service provider. Therefore,

it would have been obvious to one of ordinary skill in the art at the time the invention

was made to Lumelsky billing has necessary steps to generate the bill for customers for

invoice them for the money they owe the service provider.

Regarding claim 18, Lumeslky teaches method for charging users for storage

access in a disk subsystem (Billing capability). Lumelsky does not teach system having

plurality of tables. However, Coyote teaches service provider having plurality of rate

plans (plurality of tables).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Lumelsky as taught by Coyote to cater to the

needs of clients.

Lumelsky in view of Coyote does not teach determining based upon a time zone

of a location of a user at least one of a plurality of permitted access times. However,

Stumm teaches system and method for operating a server system adapted to provide

information files to a plurality of subscribers over communications network. Stumm

teaches that each publisher is allowed to control the times which a subscriber is

scheduled to access server system 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lumelsky in view of Coyote as taught by Stumm to secure the system resources.

Lumelsky in view of Coyote and Stumm teaches:

determining based upon a time zone of a location of a user at least one of a plurality of permitted access times, and at least one of a plurality of access rates, said access rates corresponding to said permitted access times (e.g. cell phone billing capability for plurality of time zones like Eastern, Central, Mountain and Pacific time zones for correct billing rates in 48 US States);

storing said at least one of a plurality of permitted access times, and said at least one of a plurality of access rates, said access rates corresponding to said permitted access times in a first table of the plurality of tables (Lumelsky teaches billing capability, Coyote teaches SLA, Stumm teaches scheduled time access);

receiving a computer-based request to access said resource from a user;

using the first table to enable the user to access the disk subsystem only during the at least one of a plurality of permitted access times (Stumm teaches scheduled time access);

automatically tracking time periods when said user accesses storage in said disk system and storing said access in a second table (Lumelsky teaches billing capability);

using said first table and said second table to determine for said time periods charges to said user for access, said charge based upon said time zone of a location of said user, said at least one of a plurality of permitted access times, and said at least one

of a plurality of access rates (Lumelsky teaches billing capability, Coyote teaches SLA, Stumm teaches scheduled time access); and

determining a total cost from said charges to said users for access (Lumelsky teaches billing capability).

Regarding claim 19, Lumelsky teaches charging users for storage access in a disk subsystem (policies and billing capability). Lumelsky does not teach system having plurality of tables. However, Coyote teaches service provider having plurality of rate plans (plurality of tables).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lumelsky as taught by Coyote to cater to the needs of clients.

Lumelsky in view of Coyote does not teach determining based upon a time zone of a location of a user at least one of a plurality of permitted access times. However, Stumm teaches system and method for operating a server system adapted to provide information files to a plurality of subscribers over communications network. Stumm teaches that each publisher is allowed to control the times which a subscriber is scheduled to access server system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lumelsky in view of Coyote as taught by Stumm to secure the system resources.

Lumelsky in view of Coyote and Stumm teaches:

determining based upon a time zone of a location of a user at least one of a plurality of permitted access times, and at least one of a plurality of access rates, said access rates corresponding to said permitted access times (e.g. cell phone billing capability for plurality of time zones like Eastern, Central, Mountain and Pacific time zones for correct billing rates in 48 US States);

storing said at least one of a plurality of permitted access times, and said at least one of a plurality of access rates, said access rates corresponding to said permitted access times in a first table of the plurality of tables (Lumelsky teaches billing capability, Coyote teaches SLA, Stumm teaches scheduled time access);

receiving a computer-based request to access said resource from a user;

using the first table to enable the user to access the disk subsystem only during the at least one of a plurality of permitted access times (Stumm teaches scheduled time access);

automatically tracking time periods when said user accesses storage in said disk system and storing said access in a second table (Lumelsky teaches billing capability);

using said first table and said second table to determine for said time periods charges to said user for access, said charge based upon said time zone of a location of said user, said at least one of a plurality of permitted access times, and said at least one of a plurality of access rates (Lumelsky teaches billing capability, Coyote teaches SLA, Stumm teaches scheduled time access); and

determining a total cost from said charges to said users for access (Lumelsky teaches billing capability).

Conclusion

Applicant is required under 37 CRF '1.111 (c) to consider the references fully when responding to this office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
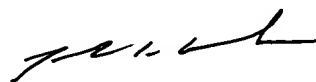
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naresh Vig whose telephone number is 703.305.3372. The examiner can normally be reached on M-F 7:30 - 5:00 (Alt Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703.308.2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Naresh Vig

JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600